

**IN THE UNITED STATES COURT OF APPEALS
FOR THE ELEVENTH CIRCUIT**

**SOUTHERN ORGANIZING
COMMITTEE FOR ECONOMIC AND
SOCIAL JUSTICE and GEORGIA
COALITION FOR THE PEOPLE'S
AGENDA,**

Petitioners,

v.

Civil Appeal No.: 02-13486-A

**U.S. ENVIRONMENTAL PROTECTION
AGENCY,**

Respondent,

and

STATE OF GEORGIA,

Intervening Respondent.

AFFIDAVIT OF HAROLD F. REHEIS

**STATE OF GEORGIA
COUNTY OF FULTON**

PERSONALLY APPEARED before the undersigned officer, authorized to administer oaths, HAROLD F. REHEIS, ("Affiant"), who, first being duly sworn, testifies as follows:

1. My name is Harold F. Reheis. I am over 18 years of age and am competent to give this Affidavit. My testimony herein is based on personal knowledge and upon documents maintained in the files of the Georgia Environmental Protection Division.

2. I am currently the Director of the Environmental Protection Division of the Department of Natural Resources of the State of Georgia (EPD). As Director, I manage all state environmental programs, including air and water quality, safe drinking water, water resource allocation, solid and hazardous waste, erosion and sedimentation control, radiation control, mine reclamation, underground storage tanks, groundwater protection, and the State Geologic Survey unit. I supervise a staff of more than 750 people and administer an annual budget of approximately \$80 million.

3. I have a Bachelor of Civil Engineering degree from the Georgia Institute of Technology and a Masters of Environmental Engineering degree from the University of Florida. I am also a Registered Professional Engineer in Georgia, South Carolina, and North Carolina.

4. I began my career with EPD in 1969 in the water quality control program. I served as the Chief of the Water Quality Control Section from 1976 until 1981, when I left EPD to manage the Process Engineering Department at

Jordan, Jones & Goulding Engineers. In 1983, I rejoined EPD. I became Assistant Director of EPD in 1984 and Director in 1991.

BACKGROUND ON OZONE AND PRECURSOR CONTROL STRATEGIES

5. The 1990 amendments to the federal Clean Air Act (CAA) established control measures and other requirements for areas designated non-attainment for the national ambient air quality standard (NAAQS) for the pollutant ozone.

6. The NAAQS for ground-level ozone is 0.12 parts per million (ppm). An area exceeds this standard each time an ambient air quality monitor anywhere within the area records a 1-hour average ozone concentration above 0.124 ppm. An area violates the 1-hour ozone NAAQS if, over a consecutive three-year period, more than three exceedences occur at any monitor. This means that if ozone monitors measure four exceedences within a year, that area will be designated as nonattainment even if no further exceedences are measured during the next two years.

7. Ozone is formed in the atmosphere through a series of complex chemical reactions that take place when precursor compounds, mainly nitrogen oxides (NO_x) and volatile organic compounds (VOCs), combine in the presence of intense sunlight. Therefore, hot stagnant weather creates conditions for the

creation of ozone. For the Atlanta non-attainment area, these conditions occur during the months of May, June, July, August, and September.

8. Scientific understanding of the formation and control of ozone has progressed rapidly in the past decade. Throughout the 1970s and mid-1980s, scientists and regulators had focused almost exclusively on VOC emissions control strategies as the primary means of controlling ozone. In the late 1980s and early 1990s, however, Atlanta was the focus of a number of studies on the role of natural or "biogenic" VOCs in the formation of ozone.¹ Originally, biogenic VOCs had been discounted and excluded from air quality models. The Atlanta studies demonstrated that this was a major omission. In Atlanta, biogenic VOC emissions play a far more significant role in ozone formation than previously understood. Based on the 1990 emissions inventory, vegetation (biogenic emissions) accounts for at least 60% of all VOC emissions in the Atlanta non-attainment area.

9. Given the abundance of biogenic VOCs in the atmosphere, ozone in Atlanta is "NO_x-limited." This means that ozone concentrations are most sensitive to the availability of NO_x in the atmosphere to fuel the chemical reaction that creates ozone. Accordingly, it has been determined through numerous studies that

¹ See U.S. Environmental Protection Agency, *The Role of Ozone Precursors in Tropospheric Ozone Formation and Control* at 2-1 (July 1993) (Section 185B Report).

the best method to address ozone in the southeast is by reducing NO_x emissions. Controls directed at reducing VOC emissions are of comparatively little benefit.

10. As EPA recognized in a 1993 Report to Congress, these findings revealed serious flaws in the one-size-fits-all control strategy that Congress had adopted in the Clean Air Act Amendments of 1990.² These findings explain why the additional controls measures that would be required if Atlanta were reclassified as a Severe non-attainment area would do little if anything to improve the ozone situation in this area.

11. In addition, recognizing that the full impact of ozone transport on an area's ability to attain the ozone NAAQS had not yet been determined, EPA in early 1995 called for a collaborative process among the states in the eastern U.S. to study ozone transport. EPA's effort led to the formation of the Ozone Transport Assessment Group (OTAG). EPA allowed states to submit their ozone attainment demonstration SIPs in the future based on the expected completion dates of OTAG's work.

12. For about two years, Georgia EPD worked with OTAG, which consisted of EPA, Georgia and 36 other states, industry, and environmental groups, to study the issue of transported ozone and ozone precursors. OTAG evaluated air

² *Id.* at 2-1 to -2.

quality monitoring data, performed extensive computerized photochemical grid modeling, and developed possible VOC and NO_x control strategies that could be recommended to EPA to address the problem of ozone transport.

13. OTAG completed its work and made recommendations to EPA in June 1997. OTAG generally concluded that there does appear to be significant interstate transport of ozone and ozone precursors and that, because of such transport, NO_x emissions should be reduced regionally to enable states in the OTAG region to attain the ozone NAAQS. OTAG left it up to EPA to calculate the necessary NO_x reductions.

14. In November 1997, based on the work of OTAG, EPA proposed a rule that would require Georgia, 21 other states and the District of Columbia to revise their SIPs to reduce NO_x emissions to address the problem of ozone transport. This rule, commonly referred to as the NO_x SIP Call, was not issued by EPA until October 1998. Even then, the reductions called for in the NO_x SIP Call were not scheduled to take effect until May 2003. In August 2000, the U.S. Court of Appeals for the D.C. Circuit extended the deadline of NO_x reductions even further to give upwind states time to comply. As a result, upwind states now have until May 2004 to implement the transport controls required by the NO_x SIP Call.

15. Both EPA and Georgia EPD have determined that the large NO_x emissions from surrounding states will prevent the metro Atlanta area from attaining the ozone standard, even with significant local controls, until the reductions called for in the NO_x SIP Call are implemented.

LOCAL EMISSIONS CONTROLS UNDER THE ATTAINMENT SIP

16. In light of these developments in the science of ozone formation and control, Georgia EPD has adopted a "NO_x-control" strategy as the most effective strategy for attaining the one-hour standard. Specific elements of this strategy include the following:

(a) Implementation of all elements of the 9% ROP SIP, which resulted in NO_x reductions of 50.10 tpd from 1990 to 1999, through, among other things, the requirement to use Reasonably Available Control Technology (RACT) for NO_x on certain stationary sources and the enhanced motor vehicle emission inspection and maintenance program.

(b) Implementation of all elements of the 15% Rate of Progress State Implementation Plan (ROP SIP), which resulted in 117.06 tons per day (tpd) of VOC reduction from 1990 to 1996, through, among other things, the enhanced motor vehicle emission inspection and maintenance program, low Reid Vapor

Pressure (RVP) gasoline, Stage II gasoline vapor recovery, a ban on open/slash/prescribed burning, and reliance upon federal rules on architectural and industrial maintenance coatings, auto body repair shops, and new vehicle emissions.

(c) Adoption of rules governing gasoline sold in a 25-county area in and around the Atlanta Ozone Non-attainment Area. Phase 1 of this rule was implemented in 1999. Phase 1 imposed limits on the sulfur content of gasoline sold during the ozone season in a 25-county area in and around the Atlanta non-attainment area. This rule reduced NO_x and VOC emissions by 11.7 tpd and 17.8 tpd, respectively, in 1999. Phase 2 of this rule will be implemented in 2003, expanding the required use of Georgia Gasoline to an additional 20 counties.

(d) Adoption of rules for modifications at Georgia Power's Yates and McDonough plants (both located within the 13-county non-attainment area), for seasonal application of natural gas technologies, thereby reducing NO_x emissions by an average of 25.90 tpd in 1999.

(e) Implementation of the Partnership For A Smog-Free Georgia (PSG) Program to obtain voluntary actions by local businesses, governments, schools, universities, and the general public to reduce single occupancy vehicle use,

thereby reducing VOC and NO_x emissions by 13.0 tpd and 8.6 tpd, respectively, during the summer season when ozone concentrations are the highest.

17. These control strategies have been effective. These measures have improved air quality even though the Atlanta area has experienced growth far above the levels projected when these plans were designed. Based on its earlier design value of 0.162 parts per million (ppm) determined from monitoring data for the years 1987 through 1989, Atlanta was classified a Serious ozone non-attainment area. However, the most recent monitoring data for the years 1999 through the 2001 ozone season (May through September), now indicates a reduction in ozone concentrations, so that the three-year design value is 0.156 ppm. In fact, during the 2001 ozone season, the Atlanta non-attainment area recorded only three exceedences. Therefore, if the Atlanta area were reclassified today, it would no longer be considered a Serious non-attainment area under the CAA. Based on the current three-year design value, Atlanta would be classified as a Moderate non-attainment area. This progress in air quality has been made despite the tremendous growth in metro Atlanta over the past decade. For example, year 2000 census data shows that within the 13-county Atlanta metropolitan area alone, the population has increased almost 40% from 1990.

18. In addition to the local control measures already implemented, Georgia will implement a number of additional measures by May 2003 to achieve attainment. Some of these measures include:

(a) Adoption of rules requiring Phase 2 Georgia Gasoline, significantly lowering the sulfur content of gasoline sold during the ozone season in a 45-county area in and around the Atlanta non-attainment area, which will reduce NO_x and VOC emissions by 23.54 tpd and 30.50 tpd, respectively, in 2003;

(b) Modifications at point sources with large electric utility steam generating units located in and around the Atlanta non-attainment area, which will reduce NO_x emissions by approximately 290 tpd in 2003.

(c) Modifications at three point sources with large NO_x emitting units other than electric utility steam generating units located in the Atlanta non-attainment area, which will reduce NO_x emissions by 18.83 tpd in 2003.

(d) Adoption of additional requirements in the enhanced motor vehicle emission inspection and maintenance program for the Atlanta non-attainment area, which will reduce NO_x and VOC emissions by 11.34 tpd and 13.17 tpd, respectively, in 2003.

(e) Expansion of New Source Review (NSR) requirements to applicable point sources located in counties around the Atlanta non-attainment area, which will reduce NO_x emissions by 21 tpd in 2003.

(f) Adoption of a rule regulating NO_x emissions from medium-sized new boilers and other fuel-burning equipment in counties around the Atlanta non-attainment area, which will reduce NO_x emissions by 0.7 tpd in 2003.

(g) Adoption of a rule regulating NO_x emissions from new and existing stationary engines and new stationary gas turbines used to generate electricity (including peaking power) located in counties around the Atlanta non-attainment area, which will reduce NO_x emissions by at least 30 tpd in 2003.

THE ROLE OF TRANSPORT

19. Unlike VOCs, NO_x can travel for hundreds of miles in the upper atmosphere. Therefore, the “transport issue” is of particular concern to areas like Atlanta that are NO_x-limited.

20. Georgia EPD has concluded, and EPA has confirmed, that the inability of the Atlanta area to attain the ozone standard to date can be attributed in large part to the significant impact of transported NO_x from upwind emission sources into the Atlanta area. The impact of transported NO_x on the ozone situation in Atlanta is highly significant. In the absence of transport controls, modeling done in

the early 1990s in preparation for the Attainment SIP indicated that reductions in all ozone precursor emissions of up to 66% beyond planned controls would have little positive effect on ozone concentrations; in some cases a 33% reduction in NO_x showed an increase in ozone. In fact, based on EPA modeling done in support of the NO_x SIP Call Rule, nitrogen oxides from upwind states (including Alabama, Kentucky, North Carolina, South Carolina, and Tennessee) are significant contributors to ozone and ozone precursors in the Atlanta area and on some days can contribute to as much as 23% of the ozone standard.

21. Georgia EPD does not have jurisdiction to control NO_x emissions from upwind sources that are out-of-state. That is the responsibility of the federal EPA. Under the Clean Air Act, EPA is required to ensure that emissions in upwind states do not interfere with attainment in downwind states. As discussed above, despite this responsibility, EPA's efforts to control upwind emissions were hampered by the lack of sufficient information concerning the formation and transport of ozone. As a result, the implementation of effective federal transport controls was delayed for a number of years. These delays have prevented Atlanta from attaining the one-hour ozone standard.

22. Some have suggested that Georgia should have filed what is known as a Section 126 Petition against its sister states in order to resolve the problem of

transport. Georgia considered filing a such a petition but opted not to pursue such action after concluding that the OTAG process was the best way to get the needed reductions in the transport of ozone. As it turns out, we were right. While some states did file Section 126 Petitions, EPA has synchronized the deadlines imposed pursuant to those petitions and the NO_x SIP Call. As a result, those who filed Section 126 Petitions are no better off than those who sought reductions through the OTAG process. Moreover, to bring a Section 126 Petition, a downwind state must identify the out-of-state source or sources with problem emissions. Neither EPA nor Georgia EPD had this information until OTAG completed its work. In short, Georgia simply had no ability to force the reduction of NO_x emissions in neighboring states on a faster timetable than that called for by EPA in the NO_x SIP Call.

23. EPA promulgated the NO_x SIP Call Rule on October 28, 1998. The NO_x SIP Call Rule is the federal answer to the problem of NO_x transport. When this rule is implemented in 2004, our best projections show that Atlanta will attain the one-hour standard.

SEVERE-AREA REQUIREMENTS WILL NOT BENEFIT AIR QUALITY IN ATLANTA

24. In contrast to the local control measures included in the Attainment SIP, and to the measures that will be implemented to control upwind out-of-state emissions when the NO_x SIP Call Rule is implemented, the additional control measures that would be required if Atlanta were reclassified (“bumped up”) from Serious to Severe would have, at most, a negligible impact on ozone concentrations. In fact, some of the measures that would be required could actually complicate and hinder the progress we have made in improving air quality.

25. It is especially important to note that reclassification as a Severe area will have no impact on the Motor Vehicle Emissions Budgets for the Atlanta area. EPA has already determined that the Attainment SIP includes all of the necessary local controls to achieve the ozone standard by the deadline applicable to Severe areas. Therefore, even if the State is required to adopt additional control measures to comply with the technical requirements of the statute, that exercise will have no effect on the MVEBs. *In other words, if Atlanta is bumped up, the MVEBs will remain exactly the same.*

26. If Atlanta were reclassified as a Severe non-attainment area, Georgia EPD would be required to include four new control programs in the Attainment SIP, and gasoline distributors will have to sell Federal Reformulated Gasoline.

None of these would have any measurable effect on air quality. The reasons are explained below.

“Major Source”

27. The first requirement applicable to Severe non-attainment areas pertains to the definition of a “major source” of VOCs or NO_x as contained in Section 182(d). This definition provides the distinction between sources that are required to meet the Reasonably Available Control Technology (RACT) requirements of the Clean Air Act and sources that are not. For Serious areas, the cut-off point is 50 tons per year: that is, sources that emit at least 50 tons per year of VOCs or NO_x are required to comply with the RACT requirements; sources that emit less than 50 tons per year are not. For Severe areas, the cut-off is reduced to 25 tons per year.

28. The elements of this requirement that would benefit air quality are already in effect in Atlanta. On its own initiative, Georgia adopted the Severe-area RACT requirements for VOCs in 1988. Stationary sources emitting VOCs in excess of 25 tons per year have been required to implement RACT since 1990. This part of the requirement is already in effect.

29. Georgia EPD considered imposing the same requirement on sources of NO_x, but found that it would have no impact on ozone concentrations, and that the

administrative and economic costs of this measure would far outweigh any benefits that might be achieved. Based on current emissions data, such a measure would require an additional 11 stationary sources to implement RACT. Combined, these sources emit a total of less than one ton of NO_x per day (approximately 347 tons per year). For comparison, note that over 105,000 tons of NO_x are emitted within the Atlanta non-attainment area each year. Even if the RACT requirements were to cause these 11 additional sources to shut down entirely and leave the non-attainment area — and there is no reason to believe this would happen — the savings in NO_x emissions would amount to less than 0.3% of the total emissions for the non-attainment area. Our modeling data indicates that this reduction in NO_x emissions would translate into ozone reductions of approximately 0.03 ppb. That is 0.03 parts per *billion* — the one-hour standard is measured in parts per *million* (0.12 ppm). A reduction of 0.03 parts per *billion* (which equates to 0.00003 parts per million) on the ozone design standard would be truly negligible.

TCM Requirement

30. The Attainment SIP also already satisfies the second requirement for a Severe area SIP. Section 182(d)(1) requires Severe areas to study and adopt “Transportation Control Measures” (TCMs) that are sufficient to meet certain goals.

31. The Attainment SIP already includes an aggressive program of TCMs. The TCMs included in the Attainment SIP satisfy the requirements of Section 182(d)(1). Under Section 182(d)(1), TCMs are required only to the extent necessary to offset “growth in emissions” of VOCs from growth in vehicle miles traveled or numbers of vehicle trips. As a result, in part, of the measures already included in the Attainment SIP, motor vehicle emissions of VOCs within the non-attainment area are currently projected to fall from 183.12 tpd in 1999 to less than 106.25 tpd by 2004. Therefore, the TCMs in the Attainment SIP achieve emissions reductions that are more than enough to satisfy the Severe area requirements of Section 182(d)(1).

32. Also note that the statutory performance standard is essentially irrelevant for this area. The requirement is to adopt TCMs sufficient to offset emissions of VOCs. The requirement does not apply to NO_x. EPA has advised Georgia and other States that we “may wish to adopt similar goals for NO_x emissions from mobile sources in cases where NO_x reductions are beneficial to attainment,” but this is a *voluntary* option.

33. For the reasons stated above, it is my understanding as the Director of Georgia EPD that nothing more would be required under Section 182(d)(1), even if Atlanta were reclassified as a Severe area.

Increase in Offset Requirement

34. Another control measure that is required to be included in a Severe-area SIP relates to the “offset requirement.” The offset requirement is essentially a nullity. It has not been invoked in the Atlanta area since 1979. Accordingly, changes to this requirement will have no impact on air quality at all.

35. The offset requirement applies only to new sources seeking to locate within the non-attainment area. In Serious areas, new sources are required to obtain “offsets” in a ratio of 1:1.2. Thus, to obtain a permit to emit 100 tons per year of NO_x, a new source would be required to obtain off-setting emissions *reductions* in the amount of 120 tons per year. Increasing the offset ratio from 1.2 to 1.3, as required for Severe areas, would have no impact on air quality. In the Atlanta non-attainment area, the current offset, at 1.2, has been more than enough to prevent new sources from locating in this area.

Section 185 Penalties

36. Next, Severe areas are required to include in the SIP a provision to penalize each and every major source of VOCs and NO_x in the event the area fails to attain the ozone standard by the Severe area attainment date (2005). The penalties are described in the statute as a punitive measure. The penalties will do nothing to help achieve the ozone standard before 2005; if anything the penalty will be counter-productive.

37. By statute, the penalty is equal to \$7,800 (\$5000 in 1990, adjusted annually for inflation) for each ton of VOCs and NO_x emitted in the calendar year following attainment in excess of 80% of a certain “baseline amount.” This penalty must be paid for each calendar year after the missed attainment date until the area is redesignated attainment. CAA § 185(a), 42 U.S.C. § 7511 d(a). The “baseline amount” is the *lower* of the “actual” or “allowable” emissions during the attainment year for Severe areas (2005). The “allowable” emissions are the emissions allowed under the permit issued by Georgia EPD. Because the baseline amount is set at the *lower* of actual or allowable emissions, however, major stationary sources would have a perverse incentive to emit *no less than* the permitted amount during the attainment year. Therefore, if anything, the penalty requirement may *interfere* with Atlanta’s ability to attain the ozone standard in the attainment year.

38. Moreover, the economic cost of the penalty requirement would be enormous. Based on existing sources in the Atlanta non-attainment area and their projected emissions, this penalty would approximate \$53 million for all major sources of VOC and NO_x. These penalties would have to be paid by local businesses, industries, and electric utilities even if they were in full compliance with the air quality rules and their air quality permits.

39. Given the perverse incentive to maximize emissions in the attainment year, it is certain that the threat of penalties will do nothing to improve the ozone situation in Atlanta before 2005. Even after that date, it is unlikely that the threat of penalties would achieve significant ozone benefits. Future emissions reductions must be achieved either by improving technology or by decreasing production. Major sources within the non-attainment area have already been required to adopt all Reasonably Available Control Technologies and more, in some cases much more. Further reductions through technological improvements will be very expensive and produce little benefit. In the near term, the only realistic way to meaningfully reduce emissions would be to cut production.

40. In any event, the penalties mandated by Section 185 would only kick in, if at all, *after* the new attainment date for Severe areas had passed. Accordingly, this penalty provision would do nothing to clean the air in the interim. As demonstrated by EPA's approval of the Attainment SIP, the best evidence available demonstrates that the Atlanta area will reach attainment by 2004. As a result, it is highly likely that the penalty provisions will never be needed.

Federal Reformulated Gasoline

41. Finally, there is one additional consequence of a reclassification to Severe that would not require a revision to the SIP. If bumped up to Severe, all

gasoline sold within the 13-county Atlanta Ozone Non-attainment Area would have to meet the standard applicable to Federal Reformulated Gasoline ("RFG") within 1 year. CAA § 211(k)(10)(D), 42 U.S.C. § 7545(k)(10)(D).

42. Federal RFG is not the right fuel solution for Atlanta. The problem with federal RFG is that it is designed to reduce emissions of VOCs, as opposed to NO_x. As a result, federal RFG will do very little to improve the ozone situation in Atlanta.

43. In fact, there is a very strong possibility that a requirement to use federal RFG will *interfere* with our progress toward clean air. Recognizing that federal RFG is not the right fuel solution for Atlanta, Georgia EPD has adopted its own fuel program that is specifically designed to achieve NO_x reductions. With the support of the oil industry and stakeholders, Georgia adopted regulations in May 1998 that lowered the average sulfur concentration in gasoline sold during the ozone season to 150 ppm ("Phase 1 Georgia Low Sulfur Gasoline"). The industry began delivering this gasoline in 1999 for use in a 25-county area in and around the Atlanta non-attainment area. Phase 1 Georgia gasoline reduces NO_x emissions from gasoline-powered vehicles by 6.6 percent at a cost of approximately 1 to 2 cents per gallon, as estimated by the oil industry.

44. In 2003, Georgia is going to a more stringent gasoline formulation ("Phase 2 Georgia Gasoline"). Phase 2 Georgia Gasoline will reduce NO_x emissions by 12.0%, or 23.54 tpd, at an estimated cost of 2.2 to 2.4 cents per gallon. Also, because of the 7.0 pound per square inch RVP limit instituted in Georgia in 1995, VOCs and toxics will both be reduced by more than 25%. Georgia Gasoline is a critical part of Georgia EPD's strategy to improve air quality through NO_x reductions and to bring Atlanta into attainment with the ozone NAAQS by 2004.

45. In contrast, under the federal Phase 2 RFG program, which started January 1, 2000, gasoline sold in RFG areas will reduce NO_x emissions by only 8.8 percent at an additional cost of about 4 to 6 cents per gallon, as estimated by EPA. Compared with Phase 2 Georgia gasoline, the implementation of federal Phase 2 RFG in the Atlanta area would result in a fuel that is at least 26% less effective in reducing NO_x emissions at about twice the incremental cost.

46. If Atlanta is bumped up to Severe, there is a strong likelihood that federal RFG will displace Georgia Phase 2 Gasoline within the 13-county non-attainment area. If this occurs, the result would exacerbate the ozone situation in metro Atlanta.

47. In theory, Georgia could try to minimize the damage caused by federal RFG by continuing the Georgia fuel program in counties *outside* the non-attainment area. This would lead to very significant distribution problems, however. Suppliers would have to find the distribution facilities to store and deliver three separate fuel mixtures (conventional gasoline, Georgia Phase 2, and federal RFG) within this State. I have actively inquired of the petroleum suppliers in this area to determine whether such an arrangement would be possible. Response from the industry has been extremely pessimistic.

48. Accordingly, there is a strong possibility that such a requirement could lead to a repeat of the situation that confronted the Midwest in 2000. The fragmentation of gasoline markets makes it more difficult for the industry to supply consumers with the fuels they need, particularly if there is an unexpected disruption in the gasoline supply and distribution system, because it hinders the ability of the industry to shift supplies from one market to another. Over the last few years, boutique fuels have caused most if not all of the country's supply problems and price spikes. Trying to create a unique fuel for Atlanta combining the requirements of Georgia Gasoline and federal RFG would only aggravate this situation.

49. There are two alternatives to this situation. The first is not practical and the second is not attractive. The first alternative would be to require federal

RFG to meet Georgia's standards as well. Based on my conversations with the industry representatives, however, this does not appear to be a practicable solution. As an initial matter, creating a boutique fuel for Atlanta that incorporates the federal RFG requirements with the Georgia low sulphur fuel requirements would require major modifications to refineries. I have been informed that the refineries are not in a position to make these modifications in the near term. Indeed, the refineries are making changes now to meet new federal requirements that take effect in 2004. At a minimum, Georgia would experience significant delays before such a fuel could be prepared for distribution in Atlanta.

50. The second alternative is the most likely — and the least attractive. To avoid creating very significant distribution and supply problems that would be associated with such an overlay of state and federal fuel requirements, Georgia EPD might be forced to abandon the Georgia fuel program. As a result, Atlanta would lose the benefits of the Georgia program. *NO_x emissions from motor vehicles in this area would very likely increase, which would produce an increase in ozone concentrations.*

51. The requirement to use federal RFG would create other environmental problems as well. Most federal RFG contains an oxygenate called MTBE. MTBE has been recently identified as a serious threat to ground and surface water

supplies, which are often contaminated through leaking underground storage tanks. Concerns over the level of MTBE in drinking water have led at least twelve states to ban MTBE. A recent study estimates that it will cost at least \$29 billion to remove MTBE from soils and drinking water supplies nationwide.

52. The alternative to MTBE is hardly better. To satisfy the oxygenate requirement in federal RFG — a requirement with no ozone benefit — ethanol is the only practical alternative to MTBE. Ethanol may be good for the economy in the Midwest, but it does nothing for ozone. In fact, by increasing vapor pressure, the ethanol may actually *increase* emissions of VOCs.

53. As a final insult, consumers in the Atlanta metropolitan area would face substantially higher gasoline prices in order to pay for this problem fuel. The fuel program adopted by Georgia EPD achieves significant air quality benefits — without poisoning the groundwater — at a cost of just two to three cents per gallon. This fuel significantly out-performs federal RFG because it is designed for the conditions that prevail in this region. If the State is forced to abandon this carefully-tailored program, consumers will be forced to pay significantly more for a fuel that does not achieve the same air quality benefits and that may actually poison the groundwater.

CONCLUSION

54. Georgia EPD has already demonstrated that the Attainment SIP, which is based on the best photochemical grid modeling and the best data available, provides the right mix of local emissions controls to attain the standard as soon as the NOx SIP Call rule is implemented. If the Extension Policy were disallowed, and if Atlanta were ultimately bumped up to Severe, Georgia EPD would be forced to adopt several new control programs that would affirmatively interfere with the ability of Atlanta to reach attainment. Georgia EPD has already adopted the Severe-area elements that would have any beneficial effect on the ozone situation in Atlanta. The remaining requirements were omitted because they are not appropriate for Atlanta. In sum, reclassifying Atlanta as a Severe area will do nothing to improve air quality and may actually set back our efforts to reach attainment.


FURTHER Affiant sayeth not.

Executed under penalty of perjury this the 28th day of June, 2002.



HAROLD F. REHEIS

Sworn to and subscribed before me
this the 28th day of June, 2002.



Notary Public, State of Georgia

Notary Public
Fulton County Georgia

My commission expires: My Comm. Expires Oct. 15, 2005